

What Is Claimed Is:

1. A dispenser for a liquid crystal display panel, comprising:
a syringe for applying a dispensing material to a substrate through a nozzle provided at one end portion thereof;
a cap unit provided at the other end portion of the syringe;
a gas supply unit for supplying a gas to the syringe through a gas pipe penetrating the cap unit;
a valve provided in the gas pipe;
a detecting unit for detecting a residual quantity of the dispensing material remaining in the syringe through a flow amount of gas supplied from the gas supply unit to the syringe; and
a controller for controlling the gas supply unit, the valve and the detecting unit.
2. The dispenser of claim 1, wherein the substrate is a thin film transistor array substrate for the liquid crystal display panel.
3. The dispenser of claim 1, wherein the substrate is a color filter substrate of the liquid crystal display panel.
4. The dispenser of claim 1, wherein the gas supply unit supplies a nitrogen gas (N₂).
5. The dispenser of claim 1, wherein the dispensing material is a sealant.

6. The dispenser of claim 1, wherein the dispensing material is liquid crystal.

7. The dispenser of claim 1, wherein the dispensing material is Ag.

8. A method for detecting a residual quantity of a dispensing material using a dispenser of a liquid crystal display panel, comprising:

supplying a gas to syringe filled with the dispensing material and detecting a first flow amount of gas;

determining a second flow amount of gas based upon the first flow amount of gas and the volume of the syringe;

repeatedly performing dispensings through the syringe filled with the dispensing material by supplying intermediate flow amounts of gas to the syringe; and

comparing a sum of intermediate flow amounts with the second flow amount of gas to determine a residual quantity of the dispensing material remaining in the syringe.

9. The method of claim 8, wherein comparing a sum of a intermediate flow amounts with the second flow amount of gas to determine a residual quantity of the dispensing material remaining in the syringe includes dividing the second flow amount of gas equally into N parts corresponding to the number of dispensings in the syringe.

10. The method of claim 9, wherein comparing a sum of the intermediate flow amounts

with the second flow amount of gas to determine a residual quantity of the dispensing material remaining in the syringe determining how many of N dispensings remain in the syringe.

11. The method of claim 8, wherein the dispensing material is a sealant.

12. The method of claim 8, wherein the dispensing material is liquid crystal.

13. The method of claim 8, wherein the dispensing material is Silver (Ag).

14. The method of claim 8, wherein determining a second flow amount of gas based upon the first flow amount of gas and the volume of the syringe is also based upon maintaining a minimum quantity of residual dispensing material that is enough to ensure a previous dispensing but not enough for a subsequent dispensing.